

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An image detecting method comprising the steps of:

- a) searching for a pattern satisfying a predetermined commencement requirement by scanning an input image;
- b) using the pattern as a starting point, with referring to a dictionary storing therein distances between the center line and an edge of a detection-target semicircle, determining for each of a predetermined number of main scan lines along a sub-scan direction whether or not a predetermined edge pattern occurs within a respective range of the distance of said dictionary, wherein each main scan line not satisfying the range according to the dictionary is counted as an error; and
- c) determining a detection of the semicircle when the number of error ~~main scan lines on which the predetermined edge pattern does not occur within the respective range of the distance of said dictionary~~ is less than a predetermined threshold.

Claim 2 (Original): The method as claimed in claim 1, wherein:

the predetermined commencement requirement comprises requirements in which a ratio of black pixels occurring on a current main scan line between predetermined edge patterns is more than a predetermined value, and, also, a ratio of white pixels at the same positions but on an immediately preceding main scan line is more than a predetermined value.

Claim 3 (Original): The method as claimed in claim 1, wherein:

the number of error main scan lines comprises any one of the total of main scan lines on which predetermined left or right edge pattern does not occur, the number of successive

main scan lines on which the predetermined left edge pattern does not occur, and the number of successive main scan lines on which the predetermined right edge pattern does not occur.

Claim 4 (Currently Amended): An image detecting system comprising:

a part searching for a pattern satisfying a predetermined commencement requirement by scanning an input image;

a part using the pattern as a starting point, with referring to a dictionary storing therein distances between the center line and an edge of a detection-target semicircle, determining for each of a predetermined number of main scan lines along a sub-scan direction whether or not a predetermined edge pattern occurs within a respective range of the distance of said dictionary, wherein each main scan line not satisfying the range according to the dictionary is counted as an error; and

a part determining a detection of the semicircle when the number of error ~~main scan lines on which the predetermined edge pattern does not occur within the respective range of the distance of said dictionary~~ is less than a predetermined threshold.

Claim 5 (Original): The system as claimed in claim 4, wherein:

the predetermined commencement requirement comprises requirements in which a ratio of black pixels occurring on a current main scan line between predetermined edge patterns is more than a predetermined value, and, also, a ratio of white pixels at the same positions but on an immediately preceding main scan line is more than a predetermined value.

Claim 6 (Original): The system as claimed in claim 4, wherein:

the number of error main scan lines comprises any one of the total of main scan lines on which predetermined left or right edge pattern does not occur, the number of successive main scan lines on which the predetermined left edge pattern does not occur, and the number of successive main scan lines on which the predetermined right edge pattern does not occur.

Claims 7-9 (Canceled).

Claim 10 (Currently Amended): A computer-readable recording medium storing therein a program, read by a computer, which thus executes the program so as to perform a process of detecting ~~an~~ a predetermined figure, said program comprising:

first program code means for searching for a pattern satisfying a predetermined commencement requirement by scanning an input image;

second program code means for using the pattern as a starting point, with referring to a dictionary storing therein distances between the center line and an edge of a detection-target semicircle, determining for each of a predetermined number of main scan lines along a sub-scan direction whether or not a predetermined edge pattern occurs within a respective range of the distance of said dictionary, wherein each main scan line not satisfying the range according to the dictionary is counted as an error; and

third program code means for determining a detection of the semicircle when the number of error ~~main scan lines on which the predetermined edge pattern does not occur within the respective range of the distance of said dictionary~~ is less than a predetermined threshold.

Claim 11 (Original): The recording medium as claimed in claim 10, wherein:

the predetermined commencement requirement comprises requirements in which a ratio of black pixels occurring on a current main scan line between

predetermined edge patterns is more than a predetermined value, and, also, a ratio of white pixels at the same positions but on an immediately preceding main scan line is more than a predetermined value.

Claim 12 (Original): The recording medium as claimed in claim 10, wherein:

the number of error main scan lines comprises any one of the total of main scan lines on which predetermined left or right edge pattern does not occur,

the number of successive main scan lines on which the predetermined left edge pattern does not occur, and the number of successive main scan lines on which the predetermined right edge pattern does not occur.